

<p>1</p> <p>SID2 (soy)          SID10 (corn)          SID12 (corn)          SID14 (rice)          SID16 (rice)          gi4704824          gi267036          gi6957724          gi3355632          SID23 (soy)</p>	<p>M--LSIIFKEFVKYNRHWIKTMQIRTCHSITQTLPQ--LPCSSRKAHHRHLPPPLNAAVSAAP-FKARKAHS-----MPPEKKEIF          MAAATTPLLAVGHSVSYKPKANAKDYYCEKFAS-SARTRVTLPOLIHWRCRSSHSSSTGTTMMAVPVLRERQDEEQEWMMGYLAPEKLEVL          M---QAHG I----AIRARGPVAATQAPARR--RQC-----AARARVTHS-----MPPEKAEVF          M---QVVG----TVRVSGCAGVAPS--R--RQC-----RVSAAVLTAAETATATRRRVTHS-----MPPEKAEVF          M---Q1OTCYCISIRIQLP---LP-WARRTRGRHKMLPPIAISATPSLKSPTKHS-----MPPERIEIF          MALKLHHTAFNPSM--AWTSSGLPRSYHL---RSHRVFMASSTIGITS-KEIPNAKKPHMPREAHVQKTHS-----MPPQKIEIF          MALLINSTITAMKQNPLIVAVSFRTTCLGSSFSPPRPLLRSVCATNPSTKSEETDKKKFRPIKEVPNQVTHT-----ITQEKLIEIF          MALKLNPPVTFPS---TRSLLNNFSSR---SPRTFLMAASTFNSTSTKAEALKKSHGPKEVHMQVTHS-----MPPQKIEIF          MAIRLNPIPT--Q----TSFLPQMPSL---RSPRFRMASTL--RGSKEVENIKKPFTPPREVHVQVTHS-----MPPQKIEIF</p>
<p>77</p> <p>SID2 (soy)          SID10 (corn)          SID12 (corn)          SID14 (rice)          SID16 (rice)          gi4704824          gi267036          gi6957724          gi3355632          SID23 (soy)</p>	<p>78</p> <p>KSLEGWASEWVPLLIKPKVEQCMQPOQNFLPDPS-LPHEEEFSHQVKELRERTKELPDEYFVVLVGDVMTEDALPLTYQTMNINLDGVKDDSGT          AHLEPWAAHVPLLIKPKPAEEAWQPSDMLPDPAALGDMITEALPLTYQSMVNRFEAVRDLTG          RSLEGWAARSLLPLIKPKVEECWQPADFLPDSS---SEMFGHEVRELRAAGL          RSLEGWARSSLLPLIKPKVECMQPTDFLDPSS---SEMFEHQVHELRAAGL          KSLJESWA-SQSVLPLIKPKVEQCMQPOEFVDPSS-LPEGDFDTQVKALDRTAELPEEYFVVLVGDVMTEDALPLTYQSMVNINLDGVDETGA          KSLEGWAAENVVLHLKPKVEKWCWQPODFLDPDA---SEG-FMDQVKELRERTKEIPDDEYLVVLVGDVMTEDALPLTYQTMNLTLDGVDETGA          KSMENWAQENLLSILYLPKVEASWQPODFLPETN---DEDRFYEQVKELRDTKEIPDDEYLVVLVGDVMTEDALPLTYQTTNTLDGVKDETGG          KSLEGWAEDVLLPHLKPKVEKCMQPODFLPEPE---SDG-FEEQVKELRAREAKEIPDDEYLVVLVGDVMTEDALPLTYQTMNLTLDGVDETGA          KSLEDWADQNLTLLKPKVERCMQPODFLDPDS---SDG-FEEQVKELRERAKEIPDDEYLVVLVGDVMTEDALPLTYQTMNLTLDGVDETGA</p>
<p>167</p> <p>SID2 (soy)          SID10 (corn)          SID12 (corn)          SID14 (rice)          SID16 (rice)          gi4704824          gi267036          gi6957724          gi3355632          SID23 (soy)</p>	<p>166</p> <p>SPSPWAVWTRAWTAEEENRHGDLRLRTYLISGRVDMAKVEKTVHYLISAGMDPGTDNNNPYLGFYTSFQERATFVAHGNTARL--AKEGGD          DSTAWARWIRGWSAEEENRHGDALSHYMLSGRVDMDRQVDRTVHRLIASGMAMNAARSPPYHGFIVYAFQERATAISHGNMARHVGAA--HGD          SNCPWAVWTRAWTAEEENRHGDLLGKMYMLSGRVDMDRMVEKTVQYLIGSGMDPGTENNPPYLGFYTSFQERATAVSHGNARL--ARAHGD          ---YLSGRFDMAEVERAHLRISGMAVDPPCSPYHAFVYTAFQERATAVAHGNTARLIVGARGHGD          SACPWAVWTRAWTAEEKRHGDLRLRTYLISGRVDMKIEKTVQYLIGSGMDPGTENNPPYLGFYTSFQERATFVSHGNARL--ARAHGD          SPSPWALWTRAWTAEEENRHGDLLNKLYLITGRVDMKQIEKTIQYLIGSGMDPRSENNPPYLGFYTSFQERATFISHGNARL--AKDHGD          SLTSWAIWTRAWTAEEENRHGDLLNKLYLITGRVDMKQIEKTIQYLIGSGMDPRSENNPPYLGFYTSFQERATFISHGNARL--AKDHGD          SLTPWAVWVRAWTAEEENRHGDLLNKLYLISGRVDMRQIEKTIQYLIGSGMDPKTENNPPYLGFYTSFQERATEFISHGNARL--AKDHGD          SLTPWAIWTRAWTAEEENRHGDLLNKLYLISGRVDMQIEKTIQYLIGSGMDPRTENSPPYLGFYTSFQERATFISHGNARL--AKEHGD</p>
<p>167</p> <p>SID2 (soy)          SID10 (corn)          SID12 (corn)          SID14 (rice)          SID16 (rice)          gi4704824          gi267036          gi6957724          gi3355632          SID23 (soy)</p>	<p>254</p> <p>SPSPWAVWTRAWTAEEENRHGDLRLRTYLISGRVDMAKVEKTVHYLISAGMDPGTDNNNPYLGFYTSFQERATFVAHGNTARL--AKEGGD          DSTAWARWIRGWSAEEENRHGDALSHYMLSGRVDMDRQVDRTVHRLIASGMAMNAARSPPYHGFIVYAFQERATAISHGNMARHVGAA--HGD          SNCPWAVWTRAWTAEEENRHGDLLGKMYMLSGRVDMDRMVEKTVQYLIGSGMDPGTENNPPYLGFYTSFQERATAVSHGNARL--ARAHGD          ---YLSGRFDMAEVERAHLRISGMAVDPPCSPYHAFVYTAFQERATAVAHGNTARLIVGARGHGD          SACPWAVWTRAWTAEEKRHGDLRLRTYLISGRVDMKIEKTVQYLIGSGMDPGTENNPPYLGFYTSFQERATFVSHGNARL--ARAHGD          SPSPWALWTRAWTAEEENRHGDLLNKLYLITGRVDMKQIEKTIQYLIGSGMDPRSENNPPYLGFYTSFQERATFISHGNARL--AKDHGD          SLTSWAIWTRAWTAEEENRHGDLLNKLYLITGRVDMKQIEKTIQYLIGSGMDPRSENNPPYLGFYTSFQERATFISHGNARL--AKDHGD          SLTPWAVWVRAWTAEEENRHGDLLNKLYLISGRVDMRQIEKTIQYLIGSGMDPKTENNPPYLGFYTSFQERATEFISHGNARL--AKDHGD          SLTPWAIWTRAWTAEEENRHGDLLNKLYLISGRVDMQIEKTIQYLIGSGMDPRTENSPPYLGFYTSFQERATFISHGNARL--AKEHGD</p>

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 PVLARLCGTTAADEKRHENAYSRIIVEKLLLEVDTGAMVAIGNMMEKIKITMPAHLYDGDPRLEFEHYSAVAQORIGVYTANDYADILEFLV  
 HVLARVCGAIADEKRHETAYTRIVAKLFEVDPDAVRALGYMMRHRITMPAALMTDGRDAHLYAHYAAAQQTGVYTASDYSRISILEHLI  
 DVLARACGTTAADEKRHETAYGRIVEQLLQLDPEGAVLAVADMRRKRITMPAHLMDGRDMDLFEHFAAVAAQRLGVYTARDYADIVEFLV  
 AALARVCGTVAADEKRHEAAYTRIVSRLLLEADPDAGVRAVARMLRGVAMPSPISDGRRDDLYACVVSIAEQAGTYTVSDYCISIVEHLV  
 DVLARTCGTTAADEKRHETAYGRIVEQLLRLPDGAMLIAIDAMMMKRITMPAHLMDGRDMNLFDHFSAVAQRLNVYTARDYADIVEFLV  
 PVLARICGTTAADEKRHENAYSRIIVEQLLRLDPTGAMVAIGDMMQKIKITMPAHLMYDGEDPKLFDFHSAVAQRMGVYTANDYADILEFLI  
 FQLAQVCGGIIAADEKRHETAYTKIVEKLLFEDPDGAVLALLADMMRKVKVSMPAHLMDGKDDNLFENYSAVAQQIGVYTAKDYADILEHLV  
 TTLAKICGTTAADEKRHETAYTRIVAKLFEIIDPDGTVQALASMMMRKRITMPAHLMDGRDDLFDHYAAVAQORIGVYTATDYAGILEFLL  
 MKAQICGGLIAADEKRHETAYTKIVEKLLFEDPDGTVLAIALADMMRKIKISMPAHLMDGEDDNLFDNYSSVAQRMGVYTAKDYADILEFLV  
 IKLAQICGMIASDEKRHETAYTKIVEKLLFEDPDGTVMFAFDMMRKIKIAMP AHLMDGRDDNLFDNYSSVAQRMGVYTAKDYADILEFLV

345  
 SID2 (soy)  
 SID10 (corn)  
 SID12 (corn)  
 SID14 (rice)  
 SID16 (rice)  
 gi 4704824  
 gi 267036  
 gi 6957724  
 gi 3355632  
 SID23 (soy)

345  
 ERWRLEKLE-GLMAEGGKRAQDFVCGGLAPRIRLQERADERARKMKHHG-VKF SWIENKE---LLL  
 RQWRVEELAAGLSGEGRARRARDYVCGGLPHKIRMEKAHDRAAQTOQKPKTSVPFSWI FDRSVN VVIP  
 KRWKLETLSGLSGEGRARRARDFVCGGLAPRMRRAERAEDRAKK-DEPRM-VKF SWI FDRE---AVV  
 REWRVEELAAGLSGEGRARRARDYVCELPQKIRMKKAHERAVKAQKPKISIPINWI FDRHVSVMLP  
 KRWKLETLSGLSGEGRARRARDFVCGGLAKRMRAERAEDRAKK-DEQRK-VKF SWI YDRE---VIV  
 GWRLEKVO-DLKDEGKKAQDFVCGGLAPRIRLQERADERARKMK-PHA-VKF SWIENKE---IIL  
 NRWKVENL-MGLSGEGRKAQDFVCGGLAPRIRLQERAKERQSLSKPKVS-L---VPF SWIENKE---LKV  
 RRWEVEKLQGMGLSGEGRRAQDYLCQTLQPIRIRLLEERANDRVKLASKSKPSVS FSWI YGRE---VEL  
 GRWKVDAF-TGLSGEGNKAQDFVCGGLPARIRKLEERAAGRAKOTSKS---VPF SWI FSRE---LVL  
 GRWKVEQL-TGLSGEGRKAQEYVCGGLPRIRLLEERAQARGKESS-T---LKF SWI HDRE---VLL

(405 aa)  
 (424 aa)  
 (380 aa)  
 (219 aa)  
 (381 aa)  
 (384 aa)  
 (398 aa)  
 (411 aa)  
 (396 aa)  
 (391 aa)

FIG. 1-2